

AMENDMENTS TO THE CLAIMS

LISTING OF CLAIMS:

Claim 1 (Currently amended). A process for the biological production of vitamin B₆ which comprises cultivating a host cell transformed or transfected by an isolated DNA or by a vector or plasmid comprising the isolated DNA under conditions conducive to the production of vitamin B₆, and recovering vitamin B₆ from the culture, wherein the host cell is selected from Sinorhizobium or Escherichia and wherein the isolated DNA comprises a nucleotide sequence encoding PdxR, which is a flavin adenine dinucleotide-dependent D-erythronate 4-phosphate dehydrogenase, selected from the group consisting of:

(a) a DNA sequence identified by SEQ ID NO:1 or the complementary strand thereof;

(b) a DNA sequence which hybridizes under stringent hybridization and stringent washing conditions to the DNA sequence complementary to the DNA sequence defined in (a), and encodes a polypeptide having the activity of flavin adenine dinucleotide-dependent D-erythronate 4-phosphate dehydrogenase, wherein the stringent hybridization conditions comprise hybridization in 2XSSC and 0.5% sodium dodecyl sulfate (SDS) at 45°C for 1 hour and wherein the stringent washing conditions comprise washing in 0.1X SSC and 0.5% SDS at 60°C for 1 hour;

(c) a DNA sequence encoding a polypeptide having the amino acid sequence encoded by the DNA sequence of (a), or (b), or (d);

(d) a DNA sequence which is at least **[[80%]]** 95% identical to a DNA encoding a polypeptide which comprises the amino acid sequence of SEQ ID NO: 2,

and encodes a polypeptide having the activity of flavin adenine dinucleotide-dependent D-erythronate 4-phosphate dehydrogenase; and

(e) a DNA sequence encoding a polypeptide which comprises an amino acid sequence ~~which is at least 80% identical to the amino acid sequence~~ of SEQ ID NO: 2, and encodes a polypeptide having the activity of flavin adenine dinucleotide-dependent D-erythronate 4-phosphate dehydrogenase.

Claim 2 (Previously Presented). A process for the biological production of vitamin B₆ which comprises introducing the isolated DNA as claimed in any one of (a) to (e) in claim 1 into an appropriate host cell selected from *Sinorhizobium melioli* or *Escherichia coli*, cultivating the obtained host cell under conditions conducive to the production of vitamin B₆, and recovering vitamin B₆ from the culture.

Claim 3 (Previously Presented). The process according to claim 1, wherein said host cell belongs to the genus *Sinorhizobium*.